

effect of grapefruit extract on cytochrome P450 isoenzymes is combined with the effect of glucosamine.

Conclusion: Clinicians should be aware of patients taking herbal medicines with such drugs like warfarin which has narrow therapeutic index.

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Preparing for major incidents in Kenya

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Abstract: Since 2000, there have been 2518 major incidents in 56 countries in Africa; 113 have been in Kenya. Kenya's major incidents profile is dominated by droughts, floods, fires, terrorism, poisoning, collapsed buildings, accidents in the transport sector and disease/epidemics. With no integrated emergency services and a lack of resources, many incidents in Kenya escalate to such an extent that they become major incidents.

Lack of specific training of emergency services personnel to respond to major incidents, poor coordination of major incident management activities, and a lack of standard operational procedures and emergency operation plans have all been shown to expose victims to increased morbidity and mortality.

This report provides a review of some of the major incidents in Kenya for the period 2000–2012, with the hope of highlighting the importance of developing an integrated and well-trained Ambulance and Fire and Rescue service appropriate for the local health care system.

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Emergency management of ST-elevation myocardial infarction in a tertiary hospital in Kenya: Are we complying with practice guidelines?

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Introduction: Current practice guidelines emphasize the importance of rapid reperfusion of patients with ST-elevation myocardial infarction (STEMI). While, several large Acute Coronary Syndrome (ACS) registries have been conducted in North America and Europe, there is very little data on the compliance with evidence based guidelines in sub-Saharan Africa. The aim of our study was to evaluate the characteristics, emergency treatment and outcomes of patients with STEMI admitted at a tertiary hospital in Kenya.

Methods: This was a retrospective chart review. Data on patient characteristics, emergency treatment, and outcomes were collected on 45 adults admitted with a diagnosis of STEMI from January 2012 to February 2013.

Results: There were 37 male patients (82%). The mean age was 59.7 ± 3.8 years. Of the 45 patients, 23 were Asian (51%), 18 were Black (40%) and four were Caucasian (9%). Thirty five patients (78%) presented within 12 hours of symptom onset. Within 10 minutes

of arrival to the hospital, 40 patients (89%) had electrocardiographs performed and 39 patients (87%) were reviewed by a doctor. Medications given on presentation were aspirin (98%), clopidogrel (91%) and anticoagulants (73%). All patients received reperfusion therapy. Twenty eight patients (62%) received fibrinolytic therapy and 17 patients (38%) had primary percutaneous coronary intervention. Door-to-needle time of <30 min was achieved in 43% of the cases. Door-to-balloon time was <90 min in 35% of the cases. All the patients survived to hospital discharge. The average length of stay was 5.3 ± 1.0 days. In-hospital complications occurred in six patients (13.3%). These included bleeding (three patients), stroke (one patient) and cardiogenic shock requiring intra-aortic balloon pump support (two patients).

Conclusion: Whereas the majority of STEMI patients are evaluated within 10 minutes of presentation, less than 50% receive reperfusion therapy within the recommended time frame. While there are attempts to comply with evidence based guidelines in resource-limited settings, there is a need to improve emergency care systems to target early reperfusion of STEMI patients.

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Major trauma audit: Metrics for improving care

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Introduction: A regional system of Major Trauma Networks has been developed in England to improve care and outcome following major trauma for a population of 58 million. The nine regions of England each have a Trauma Network served by 29 Major Trauma Centres (MTCs). The system went live in England in April 2012.

Methods: As part of the funding and accreditation structure, each MTC must submit prospectively collected audit data to the national trauma audit system – The Trauma Audit & Research Network (TARN) – to support comparisons between Trauma Networks. TRISS-like methodology is used to standardise case-mix and compare mortality rates. Audit data is also used to review three performance areas: data quality, evidence-based measures and system indicators and these make up the “Major Trauma Dashboard”.

Results: Over the 12-month period April 2012–2013, data on 37,353 patients have been submitted. 13,260 (35.4%) had an ISS > 15 and 17,414 (46.6%) an ISS 9–15. There was a trimodal age distribution with a median age of 56.2 years. Injury mechanism was blunt trauma in 96.9% and penetrating trauma in 3.1%. Within the MTCs there have been stepwise improvements in data quality. Improvements in the system of care have resulted in a reduction in the time to CT scan for patients with head trauma, increases in the number of trauma teams led by a consultant and a marked improvement in the speed of referral of secondary transfers. The 5 years trend for odds of survival, adjusted for any difference in age, gender, severity of injury (ISS) and presenting conscious level (GCS) shows an increase, but is not yet statistically significant.

Conclusions: This ongoing study indicates that a combination of regional Trauma Networks, financial incentives and audit can rapidly improve the standards of major trauma care for a large population.

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